

WHAT IS CLAIMED IS:

1. A control apparatus for a vibration type actuator that excites vibration in a vibration body by applying a frequency signal to an electro-mechanical energy converting element and relatively moves the vibration body and a contact body contacting to the vibration body, comprising:

a determination unit determining a drive direction of the vibration type actuator; and

a frequency setting unit modifying a frequency of the frequency signal according to whether the drive direction of the vibration type actuator determined by the determination unit is the same as or reverse to the last drive direction at the startup of the vibration type actuator.

2. The control apparatus for a vibration type actuator according to claim 1,

wherein the frequency setting unit lowers a frequency of the frequency signal in the case where the drive direction of the vibration type actuator is reverse to that in the last driving than that in the case the drive direction of the vibration type actuator is the same as that in the last driving.

3. The control apparatus for a vibration type actuator according to claim 1, further comprising:

a sensor detecting drive of the vibration type

actuator; and

a memory unit storing a frequency of the frequency signal at the time when it is detected by the sensor that drive of the vibration type actuator is started, wherein the frequency setting unit sets the frequency of the frequency signal on the basis of the frequency stored in the memory unit.

4. The control apparatus for a vibration type actuator according to claim 3,

wherein the frequency setting unit lowers the frequency of the frequency signal in the case where a drive direction of the vibration type actuator is reverse to that in the last driving than the frequency stored in the memory unit.

5. Electronic apparatus comprising:

a driven member that is movable;

a vibration type actuator that excites vibration in a vibration body by applying a frequency signal to an electro-mechanical energy converting element and relatively move the vibration body and a contact body contacting to the vibration body;

a determination unit determining a drive direction of the vibration type actuator; and

a frequency setting unit modifying a frequency of the frequency signal according to whether the drive direction of the vibration type actuator determined by the determination

unit is the same as or reverse to the last driving direction at startup of the vibration type actuator.

6. The electronic apparatus according to claim 5,

wherein the frequency setting unit lowers a frequency of the frequency signal in the case where a drive direction of the vibration type actuator is reverse to that in the last driving than that in the case the drive direction of the vibration type actuator is the same as that in the last driving.

7. The electronic apparatus according to claim 5, further comprising:

a sensor detecting movement of the driven member; and
a memory unit storing a frequency of the frequency signal at the time when it is detected by the sensor that drive of the driven member is started, wherein the frequency setting unit sets a frequency of the frequency signal on the basis of the frequency stored in the memory unit.

8. The electronic apparatus according to claim 7,

wherein the frequency setting unit lowers a frequency of the frequency signal in the case where a drive direction of the vibration type actuator is reverse to that in the last driving than the frequency stored in the memory unit.